

# SPRING 2015 IE PRE GRAD INTERNSHIP RESEARCH REPORT

160 undergraduates (approximately 70% of whom are first-generation, economically disadvantaged or underrepresented minority students) enrolled this semester in the Intellectual Entrepreneurship (IE) Pre Grad Internship. They work with graduate student mentors and faculty in approximately sixty academic disciplines in UT's colleges/schools. For nearly half of the interns conducting original research is a key component of their IE experience. In fact, because of the generosity of 13 of UT's deans, many IE interns travel to and present their research at academic conferences. In view of the vital role played by research at UT, as well as the ongoing need to educate students to engage in this enterprise, here are 50 examples of the research projects undertaken by spring 2015 IE Pre Grad interns in 8 of UT's colleges.

## **Cockrell School of Engineering**

Daniel Sierra (Geotechnical Engineering): Finding characteristics of soil sub-layers through acquisition, transformation and analyses of shear wave velocity profiles to better design earthquake resistant buildings.

Bria Lacour (Biomedical Engineering): Research and analysis pertaining to the binding of Tamoxifen to estrogen receptors using computational protein simulations.

## **College of Education**

Melissa Saldaña (Bilingual Education): Research and collection of data on environmental print and cultural relevance in the classroom and community and its impact on social justice and biliteracy of students.

Alejandro Sifuentes (Bilingual Education ): We are looking at public schools' attempts at promoting a language other than English through their use of visuals, such as posters, bulletin boards, etc. We also analyze what their choices signify in terms of how they think about their student population.

Jessica Preston (Health Education): Researching middle school students' reaction to outdoor food and beverage advertisements in order to determine what makes these specific types of advertisements "child oriented".

Kate Cahill (Kinesiology and Sport Management): Research pertaining to youth sport development.

Lauren Loper (Education): Research and analysis on Latinas in STEM.

Dora Gonzalez (Educational Psychology): Assisting with data collection and analysis in a quasiexperimental mixed-methods study. It investigates the role of self-efficacy when interpreting contemporary art and its relationship to situational Interest.

#### **School of Information**

Abraham Muñoz (Human-Computer Interaction and Interactive Information Retrieval at the School of Information): We are using eye-tracking and EEG to examine the way humans process information in certain scenarios and tasks in order to better the interaction and retrieval of information.

## **College of Liberal Arts**

Ethan Moorhead (Anthropology/Archaeology): Research pertaining to cultural ecology and the Toyah phase of the Texas Archaic period.

Olivia Garcia (Sociology): Research on how defining parental requirements can legitimize same sex couples as qualified parents to adopt and foster.

Truc Thanh Nguyen (Physical Anthropology): 3D imaging scanning of bones using Next Engine software.

Irlee Nguyen (English): Research and analysis pertaining to the intersectionality of African American and Asian American identity in the works of Toni Morrison and Maxine Hong Kingston.

Cyrus Huncharek (Government): I am assisting in dissertation research on donor aid coordination in Africa. We are trying to see how this aid is spent and if it undermines other types of financial and monetary payments.

Paul Viola (Anthropology): Working with Micro CT data to analyze the semicircular canals of mammals from the Mesozoic (252-66 million years ago).

Jessica Norriss (Geography): Assisted with data collection in Costa Rica and now working on data analysis of the government environmental protection programs.

Carly Ek (Psychology): Primary research assistant on a study evaluating the effects of an 8-week yoga program on aspects related to nicotine dependence and coping during a smoking quit attempt.

Catherine Leija (Psychology): Utilize Python and PsychoPy programming to develop experimental methodology used to research the quantification of consciousness in Parkinson's, Epileptic and trauma children whom have electrodes in the brain. Create visual stimuli tested on subjects.

Kristie Garza (Psychology): I am involved in a project analyzing the influence suppression of physiological factors on response to behavioral tasks.

Daniela Hernandez (Anthropology): I will be conducting a research project comparing the different policies implemented by the governments of Brazil and the U.S. since the time of slavery that have served to oppress, whether directly or indirectly, people of African descent in both countries.

Elena Keltner (Psychology): Assisting with data collection, coding, and training for a study regarding children's imitation in the Cognition, Culture, and Development lab.

Bethelhem Belachew (Psychology): Research assistant for the Cognitive, Culture, and Developmental Lab. Studying what children learn through imitation.

Alexandro Verdugo (Linguistics): Assisting with data collection and analysis on the Emergence of the Voiced Labiodental Fricative Segment [v] in Texas Spanish.

Adrian Abellanoza (Psychology): Assisting with data collection and analysis in the Cognition, Culture, and Development Laboratory for studies concerning the development of causal reasoning in children and the coexistence of natural and supernatural explanations across development.

Chloe Yu (Developmental Psychology): Research exploring children's social and cognitive development across cultures.

Maddie Pantoni (Clinical Psychology): Randomized controlled trial examining the effects of yoga on the biobehavioral mechanisms of nicotine withdrawal among anxious female smokers.

Alyssa M Hernandez (Psychology): Research involving neuropsychological assessments and social surveys concerning task-switching cognitive ability in atypically developing children (e.g., ADHD, Tourette syndrome).

Jason Paone (Philosophy): observing impromptu philosophical dialogue between experts and comparing this dialogue to that of experts in other fields to determine whether philosophers face special communication difficulties.

Melissa Cossio (Sociology): Research and analysis pertaining to the gender roles of women in contemporary society.

Monica Vela (Psychology). Assisting Jennifer Clegg with her study that is trying to understand how children learn through imitation across cultures. I am working in the Cognition, Culture, and Development Lab.

#### McCombs School of Business

Rushan Doshi (Management): Studying the effects of Equity Research on telecommunication firms and how estimated metrics change over time as a result of the market.

# **Moody College of Communication**

Nisha George (Communication Sciences and Disorders): I am participating as a peer mentor for the Training for Adults in Language and other Key Skills (TALKS) program. We work primarily with young adults with Autism Spectrum Disorders in a group setting so that each participant will be presented with different situations that both challenge and support the growth of social and pragmatic skills.

Carly Miller (Communication Sciences and Disorders): Working in the Child Language Lab assisting in collecting data for an eye-tracking study that looks at the effects of infant-directed speech.

Kaleen Timon (Communication Sciences and Disorders): I assist Dr. Franco with her research in regards to Autism Spectrum Disorders. I play with a child for 15 minutes, and then I record their utterances, as well as, going back to other data and checking previous RA's work.

Whitney Barlow (Communication Sciences and Disorders): Researching the onset and maintenance of stuttering behaviors while providing bi-weekly therapy to persons who stutter in the Michael and Tami Lang Stuttering Institute.

Michael Allen Donaldson (Communication Studies): A look at the different factors that alter interpersonal communication in the public school teachers' lounge; an observation as to how relationships are formed and maintained within this "sacred" space.

Marcos Duran (Marketing/Advertising): Assisting in developing surveys and collecting data on brand transgressions including apologies and brand equity prevention.

Mary Elizabeth Taylor (Communication Studies): Assisting in a study that examines how parents communicate with their children about health and exercise.

Carolina (Calli) Rawls (Communication Studies): Research pertaining to deception detection in email phishing scams through the use of eye-tracking technology and subsequent analysis.

Abby Bouchard (Speech Pathology): Segmenting and transcribing mother's speech directed toward her child in the Speech Production Lab.

Heather Cook (Communication Sciences and Disorders): Participating in a conversation club for adults with Autism to facilitate self-monitoring skills and interactions in new environments.

Aarthy Sundar (Communication Sciences and Disorders): I will be assisting in the research of the onset and treatment of stuttering and fluency disorders.

Emily Zinsmeyer (Communication Sciences and Disorders): Acoustic analysis of Mandarin and English speech.

Amanda Czarnik (Journalism): A study of how the handicapped (specifically those who use wheelchairs) use social media to connect with others in their same situation.

Frances Anne Ulep (Communication Sciences and Disorders): A study of the different masking abilities of those who speak English versus those who speak Mandarin. I am assisting in analyzing the data.

#### **College of Natural Sciences**

Stephanie Wells (Nutritional Sciences): Research on how the diet quality of Supplemental Nutrition Assistance Program (SNAP) participants changes over a one month period as their EBT benefits are spent.

Jesse Luu (Microbiology): Understanding the role of proteins associated with Tcell signaling using in vitro applications.

Miguel Diaz (Neuroscience): Investigating the insular cortex of epilepsy patients and learning about a seizure prediction software made by Post Doc Daniela Benites and visiting professor Dr. Zoltan Nadasdy.

Vik Kohli (Organic Chemistry): Develop novel contrast agents for MRIs and study the oxidative effect of iron.

# **School of Social Work**

John Palmieri (Social Work): Researching many different public policy issues for the NASW agenda, as well as any other research requested for House or Senate bills in concern, across a myriad of social issues.